

**Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services**

STATEMENT OF BASIS

Weyerhaeuser Company
Arcadia OSB Division
Simsboro, Lincoln Parish, Louisiana
Agency Interest Number: 26547
Activity Number: PER20080001
Proposed Permit Number: 1720-00032-V4

I. APPLICANT

Company:

Weyerhaeuser Company
130 Girl Scout Rd
Simsboro, Louisiana 71275

Facility:

Arcadia OSB Division
130 Girl Scout Rd
Simsboro, Lincoln Parish, Louisiana
511490 mE 3599845mN

II. FACILITY AND CURRENT PERMIT STATUS

Arcadia OSB Division (Arcadia OSB) is an existing oriented strand board manufacturing facility that began operation in 1995. Arcadia OSB currently operates under Permit No. 1720-00032-V3, issued April 25, 2006.

Arcadia OSB manufactures oriented strand board from southern yellow pine (SYP) and hardwood logs. Oriented strand board is a composite panel product similar to plywood but made with wood flakes. This product is engineered and rated for structural applications and is typically used as an alternative to plywood.

Raw Material Storage

Two basic raw materials are currently used to manufacture oriented strand board at Arcadia OSB – wood flakes and phenol-formaldehyde (PF) resin. The raw wood material consisting of SYP and hardwood is brought to the facility by truck. The logs are unloaded by overhead crane or rolling stock and placed in the log storage area. SYP and hardwood are processed into flakes which are used to make up the oriented strand board (OSB) product.

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Mats which do not meet weight standards are rejected, and the material is processed back into the system.

Mat Pressing

OSB mats are loaded into the press on a belt conveyor in a batch type operation. The press loader directs each incoming unpressed mat into a slot until all slots are full. The loader then transfers all mats simultaneously into the OSB press and returns to accept incoming unpressed mats. The press has 12 openings or platens, each capable of processing a 24.5-foot by 8.5-foot (gross dimensions) OSB panel. The press utilizes heat from the hot oil system and pressure from the hydraulic cylinders to cure the PF resin and produce the OSB panel. The press has a maximum capacity of 76.71 thousand square feet (MSF, 3/8" basis) of gross OSB per hour or 442,029 MSF gross per year (3/8" basis).

Mat Finishing

Following pressing operations, the rough OSB panels are then trimmed to finished panel dimensions (4' x 8') and packaged for customer shipping. Control of particulate matter from the sawing operations is provided by a series of pneumatic fabric filters. The edges of each finished package stack of OSB are sprayed with an edge seal coating before shipping. The edge sealing operation takes place within an automated spray booth located within the production building.

Fuel Cell

Arcadia OSB operates a 210 MMBtu/hr Wellons fuel cell, which combusts wood residuals and bark. The fuel cell provides 40 MMBtu/hr of heat to the hot oil system heat exchanger, and 40 MMBtu/hr to each of the three flake dryers. Hot exhaust gases from the fuel cell are ducted to the flake dryers where the heat is captured for drying. The fuel cell emissions pass through the dryers and the WESP/RTO system for treatment prior to being emitted to the atmosphere.

Hot Oil System

The fuel cell provides the heat requirements of the 40 MMBtu/hr hot oil system heat exchanger. The hot oil system provides heat to the press platens.

Natural Gas Fired Burners

Arcadia OSB operates three 10 MMBtu/hr natural gas fired burners. These burners provide 30 MMBtu/hr of heat to the three flake dryers. The emissions from the burners are routed through the dryers and the WESP/RTO system prior to being emitted to the atmosphere.

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Proposed Permit

Permit 1720-00032-V4 will be the significant modification of Part 70 operating permit 1720-00032-V3 for the Arcadia OSB facility.

Permitted Air Emissions

Estimated emissions in tons per year are as follows:

Pollutant	Before	After	Change
PM ₁₀ **	111.55	96.92	- 14.63
SO ₂	8.18	8.15	- 0.03
NO _x	240.95	234.51	- 6.44
CO**	154.90	129.01	- 25.89
VOCs**	216.22	106.24	- 109.98

LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

Pollutant	Before	After	Change
Acetaldehyde**	3.96	7.218	+ 3.258
Acrolein	29.07	2.234	- 26.836
Benzene	< 0.001	1.502	+ 1.502
Ethylbenzene	< 0.001	< 0.001	-
Formaldehyde**	17.84	15.278	- 2.562
Methanol**	13.92	8.359	- 5.561
Phenol**	0.27	2.505	+ 2.205
Propionaldehyde**	-	0.058	+ 0.058
Toluene	< 0.001	< 0.001	-
Xylene	< 0.001	< 0.001	-
Arsenic*	-	0.004	+ 0.004
Beryllium (Table 51.1)	-	< 0.001	-
Cadmium*	-	0.004	+ 0.004
Chromium VI*	-	0.004	+ 0.004
Lead	-	0.04	+ 0.04
Manganese*	-	0.022	+ 0.022
Nickel*	-	0.008	+ 0.008
Total (TPY)		37.240	

*(and compounds)

**Includes 262.8 hours per year of emissions from the Press Vent (EQT19) during routine control device maintenance as provided for in 40 CFR 63.2251.

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Applicability and Exemptions of Selected Subject Items

Table 1. Applicable Louisiana and Federal Air Quality Requirements																			
ID No.:	Description	LAC 33:III. Chapter																	
		5	9	11	13	15	2103	2104*	2107	2111	2113	2115	2123	22	29*	51*	53	56	59
	Plant Wide	1	1	1	1						1					1			
EQT 1	RTO-01 – Regenerative Thermal Oxidizer #1			1	1	1						2				1			
EQT 2	RTO-02 – Regenerative Thermal Oxidizer #2			1	1	1						2				1			
EQT 3	RTO-03 – Backup Regenerative Thermal Oxidizer			1	1	1						2				1			
EQT 4	PF-01 – Saws and Panel Trim Pneumatic Filter				1														
EQT 5	PF-02 – Flying-Cut-Off Saw and Trim Pneumatic Fabric Filter				1														
EQT 6	PF-03 – Mat Reject System Pneumatic Fabric Filter				1														
EQT 7	PF-04 – Dry Flake/Rotary Screen Pneumatic Fabric Filter				1														
EQT 8	PF-05 – Blender Pneumatic Fabric Filter				1														
EQT 9	TK-01 – Resin Storage Tank						3									1			
EQT 10	TK-02 – Resin Storage Tank						3									1			
EQT 11	TK-03 – Resin Storage Tank						3									1			

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KEY TO MATRIX

- 1 -The regulations have applicable requirements that apply to this particular emission source.
- The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
- 2 -The regulations have applicable requirements that apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
- 3 -The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.

Blank — The regulations clearly do not apply to this type of emission source.

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Table 2. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	40 CFR 60 NSPS							40 CFR 61			40 CFR 63 NESHAP				40 CFR		
		A	Ka	Kb	Db	Dc	GG	KKK	A	J	V	A	HH	QQQQ	DDDD	52	64	68
EQT 11	TK-03 – Resin Storage Tank			3											2			
EQT 12	TK-04 – Resin Storage Tank			3											2			
EQT 13	DB-01 – Debarking Operations														3			
EQT 14	FC-01 – Fuel Cell				1										3			
EQT 15	D-01 – Rotary Dryer #1														1		1	
EQT 16	D-02 – Rotary Dryer #2														1		1	
EQT 17	D-03 – Rotary Dryer #3														1		1	
EQT 18	TK-05 – Diesel Storage Tank			3											3			
EQT 19	PV-01 – OSB Press Vent														1		2	
EQT 20	B-01 – Dryer Burners														3			
FUG 1	F-01 – Plant Fugitive Emissions														3			
FUG 2	OSB Finish-01 – OSB Edge Sealer Emissions												3		1			
FUG 3	OSB Finish-02 – Laminating Line Emissions													1	3			

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Table 3. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
RTO-01 RTO-02 RTO-03	Waste Gas Disposal [LAC 33:III.2115]	EXEMPT. VOC concentration is less than 30,000 ppm. [LAC 33:III.2115.H.1.d]
RTO-01 RTO-02 RTO-03 FC-01, D-01, D-02, D-03	Emission Standards for Sulfur Dioxide [LAC 33:III.Chap 15]	DOES NOT APPLY. Units emit less than 5 tons per year of SO ₂ .
PV-01	40 CFR 64 – Compliance Assurance Monitoring	DOES NOT APPLY – Emissions are subject to emission limitation or standards proposed by the Administrator after November 15, 1990, pursuant to Section 111 or 112 of the Clean Air Act (40 CFR 64.2(b)(1)(i)).
OSB Finish-01	Surface Coating for Wood Building Products MACT [40 CFR 63 Subpart QQQQ].	DOES NOT APPLY. This fugitive contains no HAPs.
PF-01, PF-02, PF-03, PF-04, DB-01, FC-01, F-01	Plywood and Composite Wood Products MACT [40 CFR 63 Subpart DDDD].	DOES NOT APPLY. Subpart DDDD contains no compliance options or requirements for these units.

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Prevention of Significant Deterioration/Nonattainment Review

PSD does not apply.

Streamlined Equipment Leak Monitoring Program

Unit or Plant Site	Program Being Streamlined	Stream Applicability	Overall Most Stringent Program
Arcadia OSB			

MACT Requirements

This permit was reviewed for compliance with 40 CFR 70, the Louisiana Air Quality Regulations, New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP). Prevention of Significant Deterioration (PSD) does not apply.

This facility is a major source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51. Formaldehyde is emitted in a quantity above the Minimum Emission Rate (MER) under Louisiana Air Toxics Regulations. Maximum Achievable Control Technology (MACT) is required for this Class I toxic air pollutant (TAP). Impact of this pollutant on air quality is below the Louisiana Toxic Ambient Air Standards.

Arcadia OSB is subject to the following NESHAP regulations:

- NESHAP – Subpart DDDD – National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products, and
- NESHAP – Subpart QQQQ – National Emission Standards for Hazardous Air Pollutants: Surface Coating for Wood Building Products.

Air Quality Analysis

Emissions associated with the proposed facility were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions.

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

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Organic Compound – Any compound of carbon and another element. Examples: Methane (CH_4), Ethane (C_2H_6), Carbon Disulfide (CS_2)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM_{10} – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO_2) – An oxide of sulfur.

Sulfuric Acid (H_2SO_4) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

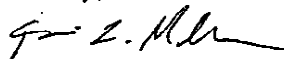
Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.

Within 30 days from the date of this letter, please provide confirmation for our records to indicate that this required task has been accomplished for the application you submitted on February 1, 2008. Included in the confirmation must be the date the statement was mailed or delivered, the name of the entity to which the statement was mailed or delivered, and affirmation that the statement that was mailed or delivered is the same as the statement that was submitted to the department as part of the permit application.

If you have any questions, please call me at (225) 219-3286.

Sincerely,



Jerri Muller
Environmental Project Specialist
Permit Application Administrative Review Group

Enclosure

c: IO-A